

Claims

[c1]

A davit system, comprising:

an elongate base having a hollow interior and an open top;

said elongate base including a straight part and an angled part that is angled downwardly relative to said straight part at a predetermined angle;

an elongate boom arm slideably disposed in said hollow interior of said elongate base;

an elongate screw rotatably mounted within the hollow interior of said elongate base;

a screw follower mounted to a trailing end of said elongate boom arm; said screw follower being in screw-threaded engagement with said elongate screw so that rotation of said elongate screw in a first direction effects travel of said screw follower and hence of said elongate boom arm in a first direction relative to said elongate base and so that rotation of said elongate screw in a second direction opposite to said first direction effects travel of said screw follower and hence of said elongate boom arm in a second direction opposite to said first direction relative to said elongate base;

said elongate boom arm being fully retracted within said hollow interior of said elongate base when said elongate screw has been rotated in said first direction a predetermined number of times;

said elongate boom arm being fully extended from said hollow interior

of said elongate base when said elongate screw has been rotated in said second direction a predetermined number of times;
said elongate boom arm being downwardly angled at said predetermined angle when said elongate boom arm is in said fully extended position.

[c2] The davit system of claim 1, further comprising:
a first gear secured to a trailing end of said elongate screw for conjoint rotation therewith;
a second gear meshingly engaged to said first gear so that rotation of said second gear effects simultaneous rotation of said first gear;
an output shaft to which said second gear is secured so that rotation of said output in a first direction causes extension of said elongate boom arm from said hollow interior of said elongate base and so that operation of said output shaft in a second direction opposite to said first direction causes retraction of said elongate boom arm into said elongate base.

[c3] The davit system of claim 2, further comprising:
said output shaft being the output shaft of a reversible motor.

[c4] The davit system of claim 2, further comprising:
said output shaft being the output shaft of a hand crank.

[c5] The davit system of claim 1, further comprising:
a first roller rotatably mounted to an upper, trailing end of said

elongate boom arm;
a second roller rotatably mounted to a lower, trailing end of said elongate boom arm in leading relation to said first roller;
said first and second rollers being longitudinally spaced from one another by a predetermined distance;
said first roller being disposed in engagement with said elongate base when said elongate boom arm is fully extended;
said second roller being disposed in engagement with said angled part of said elongate base when said elongate boom arm is fully extended.

[c6] The davit system of claim 5, further comprising:
a detent formed in said angled part of said elongate base;
a notch formed in said elongate boom arm near said trailing end;
said detent being disposed within said notch when said elongate boom arm is fully extended to prevent said elongate boom arm from sliding out of said elongate base.

[c7] The davit system of claim 1, further comprising:
a pair of cradle arms that collectively form a "V" shape for cradling a water craft;
a tab formed integrally with said pair of cradle arms where said cradle arms meet;
said tab being pivotally mounted to a leading end of said elongate boom arm;

an elongate, rigid link having a leading end pivotally secured to said tab and a trailing end pivotally secured to said screw follower; said pair of cradle arms being disposed in a first upright configuration when said elongate boom arm is fully retracted, when said elongate boom arm is fully extended, and when said elongate boom arm is in any position between said fully retracted and fully extended positions.